

Art Unit: 3635

REMARKS

On page 2 of the Action, the drawings were objected to. In view of the objection, the specification has been amended to add the reference numerals.

On page 3 of the Action, claim 12 was rejected under 35 U.S.C. 102(b) as being anticipated by *Helderman* (No. 4,250,681).

On page 3 of the Action, claim 1 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681).

On page 4 of the Action, claims 2, 5, 6, 14 and 15 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Aebegast et al.* (No. 5,120,175).

On page 5 of the Action, claims 3, 7, 9 and 11 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Zublin* (No. 2,500,267).

On page 6 of the Action, claims 4 and 8 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Hill, III et al.* (No. 2002/0011356).

On page 6 of the Action, claim 10 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Obermeier et al.* (No. 5,069,584).

On page 7 of the Action, claims 13 and 17 were rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Spies* (No. 4,798,501).

Art Unit: 3635

On page 7 of the Action, claim 16 was rejected under 35 U.S.C. 103(a) as being unpatentable over *Helderman* (No. 4,250,681) in view of *Cohn* (No. 2,755,932).

In view of the rejection, claims 1, 2, 6, 9 and 12 have been amended to alleviate the rejection. Claims 4, 5 and 8 have been amended to correct clerical errors. New claims 18 to 20 have been filed to capture proper scope of the invention. With the amendments to claims 1, 2, 6, 9 and 12, the application should be in condition for allowance for the reason explained below.

As recited in amended claim 1, a method of installing an anchor bolt in a fixing surface while avoiding an existing member installed inside the fixing surface, includes the steps of;

drilling a first fixing hole having a first diameter for fixing the anchor bolt in the fixing surface;

drilling a second fixing hole having a second diameter smaller than the first diameter from a distal end portion of the first fixing hole in an inclined state so that the second fixing hole avoids the existing member;

adjusting a shape of an anchor bolt freely bendable at a middle portion thereof to fit to the first fixing hole and the second fixing hole; and

fixing the anchor bolt to the first fixing hole and the second fixing hole.

It is noted that the amendments to claim 1 are clearly described and defined in the paragraphs [0034] and [0046] of the specification.

Art Unit: 3635

In particular, the method of installing the anchor bolt of the invention includes the steps of drilling the second fixing hole having the diameter smaller than that of the first fixing hole, adjusting the shape of the anchor bolt freely bendable to fit to the first fixing hole and the second fixing hole, and fixing the anchor bolt to the first fixing hole and the second fixing hole. More specifically, the second fixing hole is drilled in the inclined state based on a position of the existing member. Accordingly, the second fixing hole can be in one of many different inclined states, and the anchor bolt has to be freely bendable at the middle portion thereof, so that the shape of the anchor bolt is adjusted and fit to the first fixing hole and the second fixing hole. In other words, the shape of the anchor bolt is changed after the fixing hole is drilled.

*Helderman* has disclosed anchoring devices which are intended to be installed in concrete or other relatively hard material.

According to *Helderman*, an anchor 10 is formed from an integral round metal rod and includes an upper portion 11 and an angled lower portion 12. The lower portion 12 is bent at an angle "X" of between 30 degrees to 45 degrees.

As shown in FIG. 3 of *Helderman*, in installation of anchor 10, first a shallow hole 30 is drilled vertically to a depth of one and one-half to two times the rod diameter and extends into the concrete illustrated as a concrete floor slab 18. Then, the tip of the drill bit is held against the wall 31 of hole 30, see FIG. 4, at the junction of wall 31 and the angle of its bottom is formed by the drill bit tip at 32. Thus, a backstop for drill bit 17 is provided to drill angled hole 33 as seen in FIG. 5.

Art Unit: 3635

As evident from the above disclosure of *Helderman*, the anchor 10 has the curved shape predetermined in advance. The angled hole 33 is drilled according to the shape of the anchor 10. Accordingly, there is no step of adjusting the shape of the anchor bolt freely bendable to fit to the fixing hole. Further, the shallow hole 30 and the angled hole 33 are drilled with the same drill bit 17. Accordingly, the shallow hole 30 and the angled hole 33 have the same diameter.

In *Helderman*, there is no disclosure or suggestion regarding the steps of drilling the second fixing hole having the diameter smaller than that of the first fixing hole, adjusting the shape of the anchor bolt freely bendable to fit to the first fixing hole and the second fixing hole, and fixing the anchor bolt to the first fixing hole and the second fixing hole. Accordingly, *Helderman* does not teach all of the features of the invention recited in amended claim 1. Therefore, the invention recited in amended claim 1 is not anticipated by *Helderman*.

In the Office Action, the examiner cited the other references as teachings of the features of the invention other than the specific features discussed above. Accordingly, the other references do not teach the specific features discussed above.

Amended claims 2, 6, 9 and 12 recite the specific features discussed above. Accordingly, for the reasons explained above for amended claim 1, the invention recited in claims 2, 6, 9 and 12 is not anticipated by or unpatentable over any of the cited references.

Art Unit: 3635

Reconsideration and allowance are earnestly solicited.

Respectfully submitted,



Kazunao Kubotera

Reg. No. 51,194

KUBOTERA & ASSOCIATES, LLC

200 Daingerfield Rd.

Suite 202

Alexandria, VA 22314

Tel. (703) 684-9777